AMENDMENTS TO THE DRAWINGS

The attached "Replacement Sheets," which include FIGS. 1-3, replace the original sheets including FIGS. 1-3.

Attachment: Replacement Sheets

REMARKS

Claims 1-84 are now pending in the application. Applicant would like to thank the Examiner for courtesies extended during the personal interview conducted on January 5, 2006. During the interview, Applicant's representative and the Examiner discussed the rejection of Claim 1 in view of the Kim and Halsall references. No agreement was reached. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein.

DRAWINGS

The drawings stand objected to for certain informalities. Applicant has attached revised drawings for the Examiner's approval. In the "Replacement Sheets," Applicant has labeled FIGS. 1-3 as prior art according to the Examiner's suggestions.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-2, 6, 12, 14-15, 19, 25, 27-28, 32, 38, 40-41, 45 and 51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim (U.S. Pub. No. 2002/0085582) in view of Halsall ("Data Communications, Computer Networks and Open Systems, 1992). This rejection is respectfully traversed.

Kim, either singly or in combination with Halsall, fails to show, teach, or suggest transmitting a first frame using a first transmitter, terminating transmission of the first frame when a collision is detected during the transmission, and transmitting a second frame using the first transmitter before retransmitting the first frame when the second frame has a higher class of service than the first frame.

It is a longstanding rule that to establish a prima facie case of obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. _In re Royka_, 180 USPQ 143 (CCPA 1974), see MPEP §2143.03. Here, the Examiner fails to provide **any** reference to support a finding that transmitting a second frame before transmitting a first frame after a collision is obvious.

The Examiner alleges that paragraph [0016] of Kim discloses a buffer that "transmits a received second frame before retransmitting the first frame when the second frame has a higher class of service (COS) than the first frame." In particular, paragraph [0016] states:

> [t]here is provided a multimedia packet processing system, including a dynamic back-off access module configured to set back-off timers to establish a transmission sequence for packets and further configured to set a priority of the packets in order to transmit a higher priority packet before a lower priority packet, a priority preemption module configured to modify the transmission sequence for the packets in accordance with the priority of packets determined by the dynamic back-off access module, and a buffer configured to store and transmit the packets in accordance with the sequence of the priority preemption module.

Kim does not disclose terminating transmission of a first frame when a collision is detected during the transmission, and transmitting a second before retransmitting the first frame when the third frame has a higher class of service than the first frame. The Examiner relies on Halsall to disclose terminating a transmission of a first frame when a collision is detected during the transmission. During the interview, the Examiner further alleged that back-off timers as described in paragraph [0016] of Kim are typically used after a collision is detected. As such, the Examiner maintains that the use of back-off timers to modify the transmission sequence after a collision would be obvious to one skilled in the art because a prior collision detection can be assumed. In other words,

the Examiner alleged that a prior collision detection is inherent and can be implied from the use of back-off timers.

Applicant respectfully submits that a use of back-off timers does not imply a prior collision detection. For example, paragraph [0005] of Kim states "[t]he exponential back-off processes are conducted whenever the medium, to which a station tries to transmit a MAC Protocol Data Unit (MPDU), is detected as busy." Paragraph [0006] states "[w]hile multiple stations are waiting and the random back-off process is conducted, the station that selected the shortest waiting time through the random function wins in the access contention." In other words, Kim is directed to using back-off timers to modifying a transmission sequence when the medium is detected as busy as opposed to modifying a transmission sequence after a collision.

When the medium is detected as busy, the station does not attempt to transmit a frame and there is no collision. A collision only occurs when a station attempts to transmit a frame. In contrast, Applicant's invention is directed to modifying a transmission sequence after a collision. For example, in CSMA/CD (Collision Detection) systems, only the frames involved in a collision are assigned back-off times. After the back-off times the frames involved in the collision are transmitted again. Halsall states that the "two (or more) DTEs involved then wait for a further short random time interval before trying to retransmit the affected frames." Applicant's invention is not limited to frames involved in the collision, as is the case with CSMA/CD systems. Applicant respectfully submits that Claim 1, as well as its dependent claims, should be allowable for at least the above reasons. Claims 14, 27, and 40, as well as their corresponding dependent claims, should be allowable for at least similar reasons.

Claims 53-54, 61, 67, 69, 70, 72, 77 and 83 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Saxena (U.S. Pub. No. 2003/0103517) in view of Halsall and Kim. This rejection is respectfully traversed.

As described above with respect to Claim 1, Kim, either singly or in combination with Halsall, fails to show, teach, or suggest transmitting a first frame using a first transmitter, terminating transmission of the first frame when a collision is detected during the transmission, and transmitting a second frame using the first transmitter before retransmitting the first frame when the second frame has a higher class of service than the first frame. Saxena, either singly or in combination with Halsall and Kim, fails to show, teach, or suggest this limitation. Claims 53 and 69 include limitations that are analogous to the limitations of Claim 1. Applicant respectfully submits that Claims 53 and 69, as well as their corresponding dependent claims, should be allowable for at least similar reasons.

The remaining claims depend either directly or indirectly from claims that Applicant believes should be allowable. The remaining dependent claims should be allowable for at least similar reasons.

ALLOWABLE SUBJECT MATTER

The Examiner states that Claims 8-11, 21-24, 34-37, 47-50, 55, 63-66, 71 and 79-82 would be allowable if rewritten in independent form. Applicant thanks the Examiner for the allowable subject matter. Accordingly, Applicant has amended Claims 8-11 and 21-24 to include the limitations of the base claim and any intervening claims. Therefore, Claims 8-11 and 21-24 should now be in condition for allowance. Applicant elects to defer
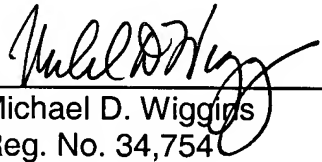
amending Claims 34-37, 47-50, 55, 63-66, 71 and 79-82 into independent form until after the Examiner considers the above remarks.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: <u>February 8, 2006</u>   By: _____
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